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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/633,316

08/04/2003

Byeong-Hwa Ahn

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06/17/2004

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EXAMINER

GRAINGER, QUANA MASHELL

ART UNIT

PAPER NUMBER

2852

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n N .

10/633,316

Applicant(s)

AHN ET AL.

Examiner

Quana Grainger

Art Unit

2852

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-10 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 3-5 and 11-13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The formal drawings are approved by the examiner.

Title

3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application

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designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-2 and 9-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Klimley et al. (6,353,722). Klimley et al. teaches a wasted toner storing apparatus of a dry type electrophotographic image forming apparatus, comprising: a wasted toner container which accommodates wasted toner generated in a print unit printing an image on a print paper by an electrophotographic method using dry toner; and a dispersing member inside the wasted toner container, dispersing the wasted toner inside the wasted toner container by rotation of the dispersing member (Figures 1-3). The dispersing member 42 comprises a rotation axis inside the wasted toner container; and a plurality of spiral protrusions disposed on the rotation axis to disperse the wasted toner.

Klimley et al. also teaches a dry type electrophotographic image forming apparatus, comprising: a print unit printing an image on a print paper by an electrophotographic method using dry toner; and a wasted toner storing apparatus container storing wasted toner generated in the print unit, wherein the wasted toner storing apparatus comprises: a wasted toner container accommodating the wasted toner; and a dispersing member inside the wasted toner container, dispersing the wasted toner inside the wasted toner container by rotation of the dispersing member (Figures 1-3).

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6. Claims 1-2 and 9-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Wang (6,546,225). Wang teaches a wasted toner storing apparatus of a dry type electrophotographic image forming apparatus, comprising: a wasted toner container which accommodates wasted toner generated in a print unit printing an image on a print paper by an electrophotographic method using dry toner; and a dispersing member inside the wasted toner container, dispersing the wasted toner inside the wasted toner container by rotation of the dispersing member (Figure 1). The dispersing member comprises a rotation axis inside the wasted toner container; and a plurality of spiral protrusions disposed on the rotation axis to disperse the wasted toner 14.

Wang also teaches a dry type electrophotographic image forming apparatus, comprising a print unit printing an image on a print paper by an electrophotographic method using dry toner; and a wasted toner storing apparatus container storing wasted toner generated in the print unit, wherein the wasted toner storing apparatus comprises: a wasted toner container accommodating the wasted toner; and a dispersing member inside the wasted toner container, dispersing the wasted toner inside the wasted toner container by rotation of the dispersing member (column 3, line 58 - column 4, line 10).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be

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patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 6-8 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang. Wang does not discuss the means by which the dispersing member is rotated. The examiner takes official notice of that it is known in the art that a dispersing member is rotated by a motor applied via a gear coupled to one end of the dispersing member. It would have been obvious to one of ordinary skill in the art at the time the invention was made to rotate the dispersing member of Wang as is known in the art by a gear and a motor.

Allowable Subject Matter

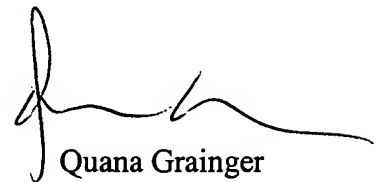
10. Claims 3-5 and 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Contact Information

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quana Grainger whose telephone number is 571-272-2135. The examiner can normally be reached on weekdays between the hours of 7-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur Grimley can be reached on 571-272-2136. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Quana Grainger
Primary Examiner
Art Unit 2852

QG